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10/757,312	01/14/2004	Gregory J. Engel		3528

7590 05/28/2004  
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EXAMINER

SNIDER, THERESA T

ART UNIT PAPER NUMBER

1744

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/757,312

Applicant(s)

ENGEL ET AL.

Examiner

Theresa T. Snider

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 13, 14, 17, 18, 20-26 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 14, 17, 18, 20-26 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/25/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1744

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13-14, 17-18, 20-26 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 13, line 2, the 'means' is missing a 'for'.

Claim 14, line 1, 'the road speed broom sweeper' lacks proper antecedent basis;

Line 2, it is unclear as to what is meant by 'road speed'.

Claim 26, step b should include a statement that states the rotating causes cleaning of the road surface; thereby tying in the preamble.

Claim 32, the claim fails to set forth any structural relationship between the various elements;

Line 3, it is unclear as to what is meant by 'superstructure'.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1744

4. Claims 13-14, 17-18, 20 and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Groh.

Groh discloses a transport means (col. 7, lines 4-12).

Groh discloses a hopper carried by the transport means (fig. 3, H).

Groh discloses means for rotary sweeping (fig. 3, #40).

Groh discloses a conveying means (fig. 3, #42).

Groh discloses a means for generating airflow from the means for rotary sweeping to the hopper (col. 7, lines 42-44).

Groh discloses a means for separating entrained dust (fig. 3, F).

With respect to claim 14, it is inherent to one of ordinary skill in the art that since the device of Groh is to be driven on a road that is would achieve 'road speed'.

With respect to claim 17, Groh discloses a drag shoe to redirect stray debris (fig. 3, #152).

With respect to claim 18, Groh discloses the means for separating including a filter (fig. 3, F).

With respect to claim 20, Groh discloses the means for generating an airflow being a fan (col. 7, lines 64-65).

With respect to claim 26, Groh discloses providing a rotary broom on a truck, the truck having a hopper and including vacuum induced airflow from the broom to the hopper and a debris conveyor (fig. 1, #10, 40, col. 7, lines 42-44, #42). Groh discloses rotating the broom against a road surface in a direction opposite to that of the forward direction of the truck (fig. 3, unnumbered arrow on #40). Groh discloses conveying debris from the conveyor to the hopper

Art Unit: 1744

(col. 7, lines 35-37). Groh discloses entraining airborne dust from the broom to the hopper (col. 6, lines 17-19).

5. Claims 13-14, 17-18 and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Zoni('521).

Zoni('521) discloses a transport means (fig. 1, #3).

Zoni('521) discloses a hopper carried by the transport means (fig. 1, #5).

Zoni('521) discloses means for rotary sweeping (fig. 1, #32).

Zoni('521) discloses a conveying means (fig. 1, #72).

Zoni('521) discloses a means for generating airflow from the means for rotary sweeping to the hopper (fig. 1, #20, col. 6, lines 56-col. 7, line 3).

Zoni('521) discloses a means for separating entrained dust (fig. 1, #19F).

With respect to claim 14, it is inherent to one of ordinary skill in the art that since the device of Zoni('521) is to be driven on a road that is would achieve 'road speed'(col. 1, lines 6-9).

With respect to claim 17, Zoni('521) discloses a drag shoe to direct trash to the rotary sweeper (fig. 1, #30a, col. 5, lines 1-3).

With respect to claim 18, Zoni('521) discloses the means for separating including a filter (fig. 1, #19).

With respect to claim 26, Zoni('521) providing a rotary broom on a truck, the truck having a hopper and including vacuum induced airflow from the broom to the hopper and a debris conveyor (fig. 1, #3,5, col. 6, lines 56-col. 7, line 3, #7). Zoni('521) discloses rotating the

Art Unit: 1744

broom against a road surface in a direction opposite to that of the forward direction of the truck (col. 5, lines 16-18). Zoni('521) discloses conveying debris from the conveyor to the hopper (fig. 1, unnumbered arrows). Zoni('521) discloses entraining airborne dust from the broom to the hopper (col. 6, lines 56-col. 7, line 3).

6. Claims 13-14, 17-18, 20-21 and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Vanderlinden('837).

Vanderlinden('837) discloses a transport means (fig. 1, #33).

Vanderlinden('837) discloses a hopper carried by the transport means (fig. 1, #36).

Vanderlinden('837) discloses means for rotary sweeping (fig. 1, #32).

Vanderlinden('837) discloses a conveying means (fig. 1, #34).

Vanderlinden('837) discloses a means for generating airflow from the means for rotary sweeping to the hopper (fig. 1, #70).

Vanderlinden('837) discloses a means for separating entrained dust (fig. 1, #60).

With respect to claim 14, it is inherent to one of ordinary skill in the art that since the device of Vanderlinden('837) is to be driven on a road that is would achieve 'road speed'.

With respect to claim 17, Vanderlinden('837) discloses a drag shoe to direct trash to the rotary sweeper (fig. 1, #46).

With respect to claim 18, Vanderlinden('837) discloses the means for separating including a filter (fig. 1, #72).

With respect to claim 20, Vanderlinden('837) discloses the means for generating an airflow being a fan (fig. 1, #70).

Art Unit: 1744

With respect to claim 21, Vanderlinden('837) discloses the transport means including at least one rear axle with the means for rotary sweeping mounted rearward of the rear axle (fig. 1, unnumbered wheel to the right of L, #32).

With respect to claim 26, Vanderlinden('837) providing a rotary broom on a truck, the truck having a hopper and including vacuum induced airflow from the broom to the hopper and a debris conveyor (fig. 1, #30,32, 36, col. 6, lines 56-col. 7, line 3, #34). Vanderlinden('837) discloses rotating the broom against a road surface in a direction opposite to that of the forward direction of the truck (fig. 1, unnumbered arrows on #32). Vanderlinden('837) discloses conveying debris from the conveyor to the hopper (fig. 1, #34). Vanderlinden('837) discloses entraining airborne dust from the broom to the hopper (col. 6, lines 15-17 and 35-40).

7. Claim 32 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Butler.

Butler discloses a truck (fig. 1).

Butler discloses a superstructure framework (fig. 1, #1).

Butler discloses a rotary broom (fig. 1, #7).

Butler discloses a rotary broom chamber (fig. 2, #5).

Butler discloses a hopper (p. 2, lines 4-8).

Butler discloses a conveyor (fig. 1, #17).

Butler discloses a conveyor housing (fig. 1, #3).

Art Unit: 1744

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderlinden('837) as applied to claim 21 above, and further in view of Groh.

Vanderlinden('837) discloses a similar sweeper however fails to disclose the type of motor used to operate the means for rotary sweeping.



Art Unit: 1744

Groh discloses a street sweeper with a means for rotary sweeping operated by a hydraulic motor (col. 10, lines 31-34). It would have been obvious to one of ordinary skill in the art to provide the hydraulic motor of Groh in Vanderlinden('837) to provide for a conventional of operating a rotary broom.

12. Claims 23-25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderlinden('837) in view of Groh as applied to claim 22 above, and further in view of Zoni('313).

Vanderlinden('837) discloses a similar sweeper however fails to disclose mounting the rotary broom using pivotal broom support arms.

Zoni('313) discloses a street sweeper having a rotary broom that is mounted using pivotal support arms (fig. 1, #16). It would have been obvious to one of ordinary skill in the art to use the pivotal support arms of Zoni('303) in Vanderlinden('837) to allow the broom to be moved upward in the event of contacting an obstacle to prevent damaging of the broom.

With respect to claims 24-25, Zoni('303) discloses the pivotal arms controlling contact of the broom with a road surface (col. 7, lines 37-46).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Joynt et al. and Lenzmeier et al. disclose street sweepers with airflow generating means. Krier et al. discloses a street sweeper with vacuumized gutter brooms.

Art Unit: 1744

14. This is a divisional of applicant's earlier Application No. 10/236,094. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

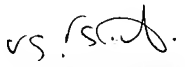
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Wednesday-Friday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**THERESA T. SNIDER**  
**PRIMARY EXAMINER**

Theresa T. Snider  
Primary Examiner  
Art Unit 1744

5/26/2004